

## TABLE – III

**Direction:** During a cricket match. India playing against Pakistan scored in the following manner:

Partnership	Runs Scored
1 <sup>st</sup> Wicket	115
2 <sup>nd</sup> Wicket	55
3 <sup>rd</sup> Wicket	71
4 <sup>th</sup> Wicket	93
5 <sup>th</sup> Wicket	46
6 <sup>th</sup> Wicket	23

- Find the average runs scored by first four batsmen?  
a) 83.5      b) 60.5      c) 66.8      d) Can't be Determined
- The maximum average runs scored by the first five batsmen could be?  
a) 80.6      b) 66.8      c) 76      d) Can't be Determined
- The minimum average runs scored by the last five batsmen to get out could be?  
a) 53.6      b) 44.4      c) 66.8      d) 0
- If the fifth down batsman gets out for a duck. Then find the average runs scored by the first six batsmen?  
a) 67.1      b) 63.3      c) 48.5      d) Can't be Determined

**Directions:** Answer the following questions based on the information given below:

The proportion of male students and the proportion of vegetarian students in a school are given below. The school has a total of 800 students, 80% of whom are in the Secondary Section and rest are equally divided between Class 11 and 12.

	Male (M)	Vegetarian (V)
Class 12	0.6	
Class 11	0.55	0.5
Secondary Section		0.55
Total	0.475	0.53

- What is the percentage of male students in the secondary section?  
a) 40      b) 45      c) 50      d) 55      e) 60
- In Class 12, twenty five per cent of the vegetarians are male. What is the difference between the number of female vegetarians and male non-vegetarians?  
a) less than 8      b) 10      c) 12      d) 14      e) 16
- What is the percentage of vegetarian students in Class 12?  
a) 40      b) 45      c) 50      d) 55      e) 60

**Direction:** 35 Funky Pizzaria was required to supply pizzas to three different parties. The total number of pizzas it had to deliver was 800, 70% of which were to be delivered to Party 3 and the rest equally divided between Party 1 and Party 2. Pizzas could be of Thin Crust (T) or Deep Dish (d) variety and come in either Normal Cheese (NC) or Extra Cheese (EC) versions. Hence, there are four types of pizzas: T-NC, T-EC, D-NC and D-EC. Partial information about proportions of T and NC pizzas ordered by the three parties is given below:

	Thin Crust (T)	Normal Cheese (NC)
Party 1	0.6	
Party 2	0.55	0.3
Party 3		0.65
Total	0.375	0.52

- How many Thin Crust pizzas were to be delivered to Party 3?  
a) 398      b) 162      c) 196      d) 364

9. How many Normal Cheese pizzas were required to be delivered to Party 1?  
a) 104                      b) 84                      c) 16                      d) 196
10. For Party 2, if 50% of the Normal Cheese pizzas were of Thin Crust variety, what was the difference between the numbers of TEC and D-EC pizzas to be delivered to Party 2?  
a) 18                      b) 12                      c) 30                      d) 24
11. Suppose that a T-NC pizza cost as much as a D-NC pizza, but  $\frac{3}{5}$ th of the price of a D-EC pizza. A D-EC pizza costs Rs. 50 more than a T-EC pizza, and the latter costs Rs. 500. If 25% of the Normal Cheese pizzas delivered to Party 1 were of Deep Dish variety, what was the total bill for Party 1?  
a) Rs. 59480              b) Rs. 59840              c) Rs. 42520              d) Rs. 45240

**Direction:** A health drink company's R & D department is trying to make various diet formulations, which can be used for certain specific purposes. It is considering a choice of 5 alternative ingredients(O, P, Q, R, and S), which can be used in different proportions in the formulations.

The table gives the composition of these ingredients. The cost per unit of each these ingredients is O:150, P:50, Q:200, R:500, S:100

Ingredients	Composition			
	Carbohydrate %	Protein %	Fat %	Minerals %
O	50	30	10	10
P	80	20	0	0
Q	10	30	50	10
R	5	50	40	5
S	45	50	0	5

12. For a recuperating patient, the doctor recommends a diet containing 10% minerals and at least 30% protein. In how many ways can we prepare this diet by mixing at least two of the ingredients?  
a) one                      b) two                      c) three                      d) four                      e) none of these
13. Which of the following is the formulation having the lowest cost per unit for a diet having 10% fat and at least 30 % protein? The diet has to be formed by mixing two ingredients.  
a) P and Q                      b) P and S                      c) P and R                      d) Q and S                      e) R and S
14. In what proportion P, Q, and S should be mixed to make a diet having at least 60% carbohydrate at the lowest per-unit cost?  
a) 2: 1:3                      b) 4:1:2                      c) 2:1:4                      d) 3:1:2                      e) 4:1:1
15. The company is planning to launch a balanced diet required for the growth needs of adolescent children. This diet must contain at least 30% of carbohydrates and protein, no more than 25% fat, and at least 5% minerals. Which one of the following combinations of equally mixed ingredients is feasible?  
a) O and P                      b) R and S                      c) P and S                      d) Q and R                      e) O and S

**Direction:** In a certain board examination, students were to appear for examination in five subjects: English, Hindi, Mathematics, Science, and Social Science. Due to a certain emergency situation, a few of the examinations could not be conducted for some students. Hence, some students missed one examination and some others missed two examinations. Nobody missed more than two examinations.

The board adopted the following policy for awarding marks to students. If a student appeared in all five examinations, then the marks awarded in each of the examinations were on the basis of the scores obtained by them in those examinations.

If a student missed only one examination, then the marks awarded in that examination was the average of the best three among the four scores in the examinations they appeared for.

If a student missed two examinations, then the marks awarded in each of these examinations was the average of the best two among the three scores in the examinations they appeared for.

The marks obtained by six students in the examination are given in the table below. Each of them missed either one or two examinations.

	English	Hindi	Mathematics	Science	Social Science
Alva	80	75	70	75	60
Bithi	90	80	55	85	85
Carl	75	80	90	100	90
Deep	70	90	100	90	80
Esha	80	85	95	60	55
Foni	83	72	78	88	83

The following facts are also known.

- I. Four of these students appeared in each of the English, Hindi, Science, and Social Science examinations.
- II. The student who missed the Mathematics examination did not miss any other examination.
- III. One of the students who missed the Hindi examination did not miss any other examination. The other student who missed the Hindi examination also missed the Science examination.

16. Who among the following did not appear for the Mathematics examination?  
a) Carl      b) Alva      c) Esha      d) Foni
17. Which students did not appear for the English examination?  
a) Cannot be determined      b) Alva and Bithi  
c) Carl and Deep      d) Esha and Foni
18. What BEST can be concluded about the students who did not appear for the Hindi examination?  
a) Two among Alva, Deep and Esha      b) Alva and Esha  
c) Alva and Deep      d) Deep and Esha
19. What BEST can be concluded about the students who missed the Science examination?  
a) Deep and Bithi      b) Alva and Bithi  
c) Alva and Deep      d) Bithi and one out of Alva and Deep
20. How many out of these six students missed exactly one examination?
21. For how many students can we be definite about which examinations they missed?

**Direction for 22 to 24:** There are 100 employees in an organization across five departments. The following table gives the department-wise distribution of average age, average basic pay and allowances. The gross pay of an employee is the sum of his/her basic pay and allowances.

There are limited numbers of employees considered for transfer/promotion across departments. Whenever a person is transferred/promoted from a department of lower average age to a department of higher average age, he/she will get an additional allowance of 10% of basic pay over and above his/her current allowance. There will not be any change in pay structure if a person is transferred/ promoted from a department with higher average age to a department with lower average age.

Department	Number Of Employees	Average Age (Years)	Average Basic (Rs.)	Allowance (% of Basic Pay)
HR	5	45	5000	70
Marketing	30	35	6000	80
Finance	20	30	6500	60
Business Development	35	42	7500	75
Maintenance	10	35	5500	50

22. There was a mutual transfer of an employee between Marketing and Finance departments and transfer of one employee from Marketing to HR. As a result, the average age of Finance department increased by one year and that of marketing department remained the same. What is the new average age of HR department?  
a) 30      b) 35      c) 40      d) 45      e) cannot be determined
23. What is the approximate percentage change in the average gross pay of the HR department due to transfer of a 40-yr old person with basic pay of Rs. 8000 from the Marketing department?  
a) 9%      b) 11%      c) 13%      d) 15%      e) 17%
24. If two employees (each with basic pay of Rs. 6000) are transferred from the Maintenance department to the HR department and one person (with basic pay of Rs. 8000) was transferred from the Marketing department to the HR department, what will be the percentage change in average basic pay of HR department?  
a) 10.5%      b) 12.5%      c) 15%      d) 30%      e) 40%

**Direction:** In a Class X Board examination, ten papers are distributed over five Groups — PCB, Mathematics, Social Science, Vernacular and English. Each of the ten papers is evaluated out of 100. The final score of a student is calculated in the following manner. First, the Group Scores are obtained by averaging marks in the papers within the Group. The final score is the simple average of the Group Scores. The data for the top ten students are presented below. (Dipan's score in English Paper II has been intentionally removed in the table.)

Name of the Student	PCB Group	Maths Group	Social Science Group	Vernacular	English Group	Final Score
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	Phy.	Chem.	Bio.		Hist.	Geo.	Paper I	Paper II	Paper I	Paper II	
Ayesha (G)	98	96	97	98	95	93	94	96	96	98	96.2
Ram (B)	97	99	95	97	95	96	94	94	96	98	96.1
Dipan (B)	98	98	98	95	96	95	96	94	96	??	96.0
Sagnik (B)	97	98	99	96	96	98	94	97	92	94	95.9
Sanjiv (B)	95	96	97	98	97	96	92	93	95	96	95.7
Shreya (G)	96	89	85	100	97	98	94	95	96	95	95.5
Joseph (B)	90	94	98	100	94	97	90	92	94	95	95.0
Agni (B)	96	99	96	99	95	96	82	93	92	93	94.3
Pritam (B)	98	98	95	98	83	95	90	93	94	94	93.9
Tirna (G)	96	98	97	99	85	94	92	91	87	96	93.7

Note: B or G against the name of a student respectively indicates whether the student is a boy or a girl.

25. How much did Dipan get in English Paper II?

- (a) 94 (b) 96.5 (c) 97 (d) 98 (e) 99

26. Students who obtained Group Scores of at least 95 in every group are eligible to apply for a prize. Among those who are eligible, the student obtaining the highest Group Score in Social Science Group is awarded this prize. The prize was awarded to:

- (a) Shreya (b) Ram (c) Ayesha (d) Dipan (e) no one from the top ten

27. Among the top ten students, how many boys scored at least 95 in at least one paper from each of the groups?

- (a) 1 (b) 2 (c) 3 (d) 4 (e) 5

28. Had Joseph, Agni, Pritam and Tirna each obtained Group Score of 100 in the Social Science Group, then their standing in decreasing order of final score would be:

- (a) Pritam, Joseph, Tirna, Agni  
(b) Joseph, Tirna, Agni, Pritam  
(c) Pritam, Agni, Tima, Joseph  
(d) Joseph, Tirna, Pritam, Agni  
(e) Pritam, Tirna, Agni, Joseph

### Answer Key

1. D	2. A	3. D	4. A	5. B	6. E	7. A	8. B
9. C	10. B	11. A	12. A	13. D	14. E	15. E	16. A
17. D	18. C	19. D	20. 3	21. 4	22. C	23. C	24. B
25. C	26. D	27. A	28. A				